

Appl. No. 09/811,028
Amdt. Dated September 16, 2005
Reply to Office Action of June 30, 2005

Attorney Docket No. 81841.0154
Customer No. 26021

REMARKS/ARGUMENTS:

Claims 1, 11, and 19 are amended. Support for the amendment to the claims can be found at page 1, lines 17-22 of the Applicant's specification. Claims 1-24 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Claims 1-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tersteeg et al. (U.S. Patent No. 4,219,529) in view of Minekane (U.S. Patent No. 4,906,433) and Kerr et al. (U.S. Patent No. 5,075,079). The Applicant respectfully traverses this rejection.

Claim 1, as amended, is as follows:

A rotary incubation station of an automated analyzer, comprising:

- a. a platform;
- b. a generally circular ring-shaped outside rotary wheel having a plurality of nesting locations for washing and reading vessels;
- c. means for positioning said outside rotary wheel on said platform, allowing said outside rotary wheel to rotate;
- d. a generally circular disc-shaped inside rotary wheel having a plurality of nesting locations for incubation and storage of said vessels;
- e. means for positioning said inside rotary wheel on said platform inside said outside rotary wheel, allowing said inside rotary wheel to rotate;
- f. first spur gear means for rotating said outside rotary wheel including a plurality of spur gear teeth on the inner periphery of the outside rotary wheel, wherein the first spur gear means allows

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accurate control of the rotation of said outside rotary wheel;

g. second spur gear means for rotating said inside rotary wheel independent of the rotation of said outside rotary wheel, the second spur gear means comprising a plurality of spur gear teeth on the outer periphery of the inside rotary wheel and allowing accurate control of the rotation of said inside rotary wheel; and

h. two pick and place assemblies for transferring said vessels between the inside rotary wheel and outside rotary wheel.

Claim 1 was amended to clarify that both the inner and outer rotary wheels are for the same vessels. Thus, present claim 1 defines an analyzer station with an inner wheel for incubation of vessels and an outer wheel for washing and reading those same vessels, wherein pick and place assemblies transfer these vessels between the inside rotary wheel and outside rotary wheel. This limitation is neither taught nor suggested by the cited references.

The Examiner states,

"It would have been obvious to one of ordinary skill in the art to use a two wheel system such as disclosed in Minekane in the analyzer of Tersteeg to decrease the time needed for the reagent vessels to move throughout the system and be filled with reagent."

The Applicant respectfully disagrees. Minekane teaches the use of a circular incubation path for reaction tubes and a separate circular reagent containers storage area. When reagents are needed for a particular sample analysis, liquids are aspirated out of the reagent containers (called reagent vessels) and dispensed into a reaction tube. In the prior art, as more reagent containers were added (e.g., for an expanded menu or for greater test capacity) the single reagent containers storage wheel would grow large, causing space constraints and long reagent container access times. Minekane overcomes this problem by adding additional

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wheels of reagent containers (reagent vessels) accessible to a pipettor (reagent-distributing nozzle) that can move reagents from the storage containers to the reaction tubes. (Minekane, column 2, line 63-column 3, line 7).

Therefore, Minekane uses two different types of vessels in the inner and outer wheels. In Minekane, reagents from the reagent containers in an outer wheel are removed and added to reaction tubes in an inner wheel. Consequently, the reaction tubes cannot be transferred from the inner wheel to the outer wheel as the outer wheel already has reagent containers from which reagents are removed and pipetted into the reaction tubes in the inner wheel. In contrast, the present invention uses the same vessels in the inner and outer wheels.

It is an aspect of the present invention that the circular incubation path of prior art analyzers be replaced with a dense packed, random access wheel that can move either clockwise or counter-clockwise to provide flexible incubation times not available in the cited references. Reaction vessels can be moved at programmable times from any position in the dense packed, random access wheel to the wash and read wheel. (Applicant's specification, at page 3, lines 4-12; page 7, lines 4-16). Thus, by allowing the transferring of vessels from the inner wheel to the outer wheel, flexible incubation times can be obtained.

Kerr fails to teach or suggest an inside and outside rotary wheel and is not relied upon by the Examiner for such. Instead, the Examiner relies on Kerr for teaching a slide analysis system comprising a slide holding module and a incubator module, wherein the system further includes a pick and place mechanism.

In light of the foregoing, Applicant respectfully submits that the references discussed above could not have rendered claim 1 obvious, because the combination of references fails to teach or suggest each and every claim limitation. Claims 2-10 depend from claim 1 and are patentable over the cited references for at least the

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same reasons as claim 1. Withdrawal of these rejections is thus respectfully requested.

Claims 11-24 similarly require an analyzer station with an inner wheel for incubation of reaction vessels and an outer wheel for washing and reading the same vessels, wherein pick and place assemblies transfer these vessels between the inside rotary wheel and outside rotary wheel. Therefore, claims 11-24 cannot be rendered obvious over the cited references for the same reasons discussed above. Withdrawal of these rejections is thus respectfully requested.

Applicant believes the foregoing amendments comply with requirements of form and thus may be admitted under 37 C.F.R. § 1.116(b). In addition, admission is requested under 37 C.F.R. § 1.116(b) as presenting rejected claims in better form for consideration on appeal.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

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If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
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Date: September 16, 2005

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